

Notice of Allowability

Application No.

10/511,287

Applicant(s)

OORSCHOT, RONALD WILLEM ARIE

Examiner

Darren W. Ark

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt. filed on 6/02/2008 and Telephone Interview on 6/20/2008.
2. ☒ The allowed claim(s) is/are 1-3,5,6,12-15,18,19,21,23 and 24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11/22/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Darren W. Ark/
Darren W. Ark
Primary Examiner, Art Unit 3643

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven T. Zuschlag on Friday, June 20, 2008.

The application has been amended as follows:

Specification:

Page 9, line 4, deleted "V".

Claims:

Claim 1. A method for collecting animals living on or in a water bottom, the method comprising:

providing, wherein a collecting device which can be ~~[[is]]~~ moved over the bottom in a first direction, said ~~which~~ collecting device is provided with means for moving the animals from or off the water bottom, said means for moving including at least one tine that can penetrate into the bottom and with which said animals can be taken or forced from or off the bottom, ~~while~~ said at least one tine is provided with fluid

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outlet means through which, under pressure, a fluid can be ~~[[is]]~~ forced into the bottom, such that a top layer of the bottom is stirred up and animals living therein or thereon are dislodged, which animals are caught in the collecting device, and wherein detecting ~~detection~~ means are provided on the collecting device in front of the at least one tine when viewed in said first direction, with which a ~~[[the]]~~ presence of animals in or on the bottom is detected, ~~while~~ operating means are also provided on the collecting device for moving the at least one tine, which are activated on a ~~[[the]]~~ basis of signals of said detecting means, an ~~[[the]]~~ arrangement being such that the at least one tine is only moved into the bottom when the detecting means in front of the at least one ~~respective~~ tine detects the presence of animals in or on the bottom, and is moved from the bottom again when no more animals are detected in front of the at least one ~~respective~~ tine, and wherein said at least one tine is extendable below an underside of said collecting device for moving said at least one tine into the bottom, and is retractable above said underside of said collecting device for removing said at least one tine from said bottom in an ~~[[the]]~~ absence of a signal from said detecting means;

moving said collecting device over the bottom in said first direction;

detecting the presence of animals in front of said collecting device using

said detecting means;

activating said operating means to move said at least one tine on the

basis of the signals of said detecting means;

applying a fluid under pressure through said fluid outlet means below the bottom upon detection of the presence of animals in front of said collecting device; and
collecting animals dislodged by said applied fluid under pressure.

Claim 2. A method according to claim 1, wherein said step of providing a collecting device further including said at least one tine comprising a plurality of tines being ~~[[is]]~~ provided and the collecting device can be ~~[[is]]~~ moved in said first direction over the bottom and the step of applying a fluid under pressure further includes said fluid being ~~[[is]]~~ selectively forced into the bottom in approximately the same direction from an individual tine of said plurality of tines based on the detecting means detecting the presence of an animal in front of said individual tine, wherein each tine of said plurality of tines is independently activatable.

Claim 3. A method according to claim 1, wherein the step of applying a fluid under pressure further including said fluid being ~~[[is]]~~ introduced into the bottom less than 25 cm below a ~~[[the]]~~ surface of the bottom.

Claim 5. A method according to claim 1, wherein the step of providing a collecting device further including, viewed in said first direction, in front of the at least one tine, detecting means are provided with which the presence of animals in or on the bottom is detected, ~~while~~ operating means are provided for controlling electric means arranged

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near the at least one tine~~[[s]]~~, for generating at least one of current impulses, an electric field, and a magnetic field, which means are activated on the basis of signals of said detecting means, the arrangement being such that said electric means are only activated when the detecting means in front of the at least one ~~respective~~ tine detects the presence of animals in or on the bottom and the at least one ~~tine is~~ ~~[[are]]~~ moved from the bottom again when no more animals are detected in front of the at least one ~~respective~~ tine.

Claim 6. A method according to claim 1, wherein the step of detecting the presence of animals further includes the animals being ~~[[are]]~~ detected with the aid of sound.

Claim 12. A device for collecting animals living in or on a ~~[[the]]~~ water bottom, provided with:

supporting means for support on a water bottom;

detecting means supported on said supporting means for detecting animals in or on the water bottom; and

means for moving the animals from or off the water bottom, said means for moving the animals being supported on said supporting means and being drivable on a ~~[[the]]~~ basis of a signal to be delivered by the detecting means,

wherein the means for moving the animals from or off the water bottom comprises at least one tine which, during use, is extendable below a plane defined by ~~[[the]]~~ undersides of the supporting means, at least into the bottom, and water supply

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means for, during use, introducing water under pressure into the bottom, at most at a gentle angle relative to said plane, at least to a bottom over which the device can be moved, said tine being further retractable above the ~~[[a]]~~ plane defined by said undersides of said supporting means in an ~~[[the]]~~ absence of a signal from said detecting means, and

wherein said at least one tine comprises a row of tines being ~~[[is]]~~ provided, and

wherein means are provided for selectively moving each individual tine of said row of tines with respect to said row of tines between a first position in which the respective individual tine extends, during use, at least partly into the bottom, and a second position in which the respective tine is retracted above the bottom, wherein each individual tine of said row of tines is independently movable based on a detection of an animal by said detecting means at said respective tine.

Claim 13. A device according to claim 12, wherein ~~the or each~~ individual tine of said row of tines is provided with a free end extending, at least in a position of use, approximately parallel to said plane and ~~[[,]]~~ at least a ~~[[the]]~~ top side of the water bottom, while the water supply means are arranged for introducing water approximately parallel to said this free end.

Claim 14. A device according to claim 12, wherein the means for moving the animals from or ~~[[of]]~~ off the water bottom comprise electric or mechanical means for generating at least one of a current surge, a magnetic field, an electric field and a vibration field.

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Claim 18. A method for collecting animals from a [[the]] bottom of a body of water comprising the steps of:

moving a collecting device along a [[the]] bottom surface of a body of water;

detecting a [[the]] presence of animals in front of said collecting device;

applying a fluid under pressure below the bottom surface of the body of water upon detection of the presence of animals in front of said collecting device; and

collecting animals dislodged by said applied fluid under pressure,

wherein said collecting device includes an underside movable along the bottom surface of the body of water, and said step of applying a fluid under pressure includes the step of extending a tine provided on said collecting device below said collecting device underside into the bottom surface, said tine including a nozzle for applying said fluid under pressure.

Claim 19. A method as defined in Claim 18, further including the step of retracting said tine above said collecting device underside to remove said tine ~~time~~ from below the bottom surface upon detection of an [[the]] absence of animals in front of said collection device.

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Claim 21. A device ~~as defined in Claim 20~~, for collecting animals from a [[the]] bottom of a body of water comprising:

a support frame having at least one runner movable along a bottom surface of a body of water;

an animal detector provided on said support frame for detecting the presence of animals in a [[the]] vicinity of said support frame;

an animal mover provided on said support frame, said animal mover being activatable by said animal detector upon the detection of the presence of animals to move the detected animals from the bottom of the body of water; and

an animal collector for collecting the moved animals;

wherein said animal mover comprises at least one tine movable between a first position, wherein said at least one tine is extended below an underside of said runner such that said at least one tine is inserted below the bottom surface of the body of water, and a second position, wherein said at least one tine is retracted above said underside of said runner such that said at least one tine is removed from the bottom surface of the body of water, said at least one tine being driven by said animal detector and including a fluid outlet for applying a fluid under pressure into the bottom surface of the body of water when said at least one tine is in said first position.

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Claim 23. A method as defined in Claim 18, wherein said tine comprises a plurality of tines and said step of applying a fluid under pressure comprises the step of selectively applying a fluid under pressure from one of said [[a]] plurality tines extending below the bottom surface of the body of water upon detection of the presence of an animal in front of said one tine, wherein each tine of said plurality of tines is independently activatable.

Claim 24. A device for collecting animals from a [[the]] bottom of a body of water comprising:

- a support frame having at least one runner movable along a bottom surface of a body of water;

- an animal detector provided on said support frame for detecting the presence of animals in a [[the]] vicinity of said support frame;

- an animal mover provided on said support frame, said animal mover being activatable by said animal detector upon the detection of the presence of animals to move the detected animals from the bottom of the body of water; and

- an animal collector for collecting the moved animals,

- wherein said animal mover comprises at least one tine movable between a first position, wherein said at least one tine is extended below a plane defined by an underside of said runner such that said at least one tine is inserted below the bottom surface of the body of water, and a second position, wherein said at least one tine is retracted above said plane defined by said underside of said runner such that said at least one tine is removed from the bottom surface of the body of water, said at least one

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tine being driven by said animal detector and including a fluid outlet for applying a fluid under pressure into the bottom surface of the body of water when said at least one tine is in said first position, and

wherein said at least one tine of said animal mover comprises a plurality of tines, each individual tine being selectively, independently movable with respect to the others based upon the detection by said animal detector of the presence or absence of an animal at said respective individual tine.

2. The following is an examiner's statement of reasons for allowance:

In regard to claim 1, the prior art of record does not disclose a method for collecting animals living on or in a water bottom, the method comprising providing a collecting device wherein detecting means are provided on the collecting device in front of the at least one tine when viewed in said first direction, with which a presence of animals in or on the bottom is detected, operating means are also provided on the collecting device for moving the at least one tine, which are activated on a basis of signals of said detecting means, an arrangement being such that the at least one tine is only moved into the bottom when the detecting means in front of the at least one tine detects the presence of animals in or on the bottom, and is moved from the bottom again when no more animals are detected in front of the at least one tine, and wherein said at least one tine is extendable below an underside of said collecting device for moving said at least one tine into the bottom, and is retractable above said underside of said collecting device for removing said at least one tine from said bottom in an absence

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of a signal from said detecting means; activating said operating means to move said at least one tine on the basis of the signals of said detecting means; applying a fluid under pressure through said fluid outlet means below the bottom upon detection of the presence of animals in front of said collecting device.

In regard to claim 12, the prior art of record does not disclose a device for collecting animals living in or on a water bottom, provided with means being provided for selectively moving each individual tine of said row of tines with respect to said row of tines between a first position in which the respective individual tine extends, during use, at least partly into the bottom, and a second position in which the respective tine is retracted above the bottom, wherein each individual tine of said row of tines is independently movable based on a detection of an animal by said detecting means at said respective tine.

In regard to claim 18, the prior art of record does not disclose a method for collecting animals from a bottom of a body of water comprising the steps of detecting a presence of animals in front of said collecting device; applying a fluid under pressure below the bottom surface of the body of water upon detection of the presence of animals in front of said collecting device; and wherein said step of applying a fluid under pressure includes the step of extending a tine provided on said collecting device below said collecting device underside into the bottom surface, said tine including a nozzle for applying said fluid under pressure.

In regard to claim 21, the prior art of record does not disclose a device for collecting animals from a bottom of a body of water comprising wherein said animal

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mover comprises at least one tine movable between a first position, wherein said at least one tine is extended below an underside of said runner such that said at least one tine is inserted below the bottom surface of the body of water, and a second position, wherein said at least one tine is retracted above said underside of said runner such that said at least one tine is removed from the bottom surface of the body of water, said at least one tine being driven by said animal detector and including a fluid outlet for applying a fluid under pressure into the bottom surface of the body of water when said at least one tine is in said first position.

In regard to claim 24, the prior art of record does not disclose a device for collecting animals from a bottom of a body of water comprising wherein said animal mover comprises at least one tine movable between a first position, wherein said at least one tine is extended below a plane defined by an underside of said runner such that said at least one tine is inserted below the bottom surface of the body of water, and a second position, wherein said at least one tine is retracted above said plane defined by said underside of said runner such that said at least one tine is removed from the bottom surface of the body of water, said at least one tine being driven by said animal detector and including a fluid outlet for applying a fluid under pressure into the bottom surface of the body of water when said at least one tine is in said first position, and wherein said at least one tine of said animal mover comprises a plurality of tines, each individual tine being selectively, independently movable with respect to the others based upon the detection by said animal detector of the presence or absence of an animal at said respective individual tine.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Ark whose telephone number is (571) 272-6885. The examiner can normally be reached on M-F, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Darren W. Ark/
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DWA